

*Dcb-Copy*

## GOLIAD COUNTY GROUNDWATER CONSERVATION DISTRICT

P. O. BOX 562 GOLIAD, TEXAS 77963

Phone -361-645-1716 fax - 361-645-1772 email - [gced@goliad.net](mailto:gced@goliad.net)

### Board of Directors:

Art Johnson - President  
Joe Kowalewski - Vice-President  
Barbara Smith - Secretary/Treasurer  
Directors - John Dierer, John E. Duke, Wesley Holt, Randolph  
General Manager - Barbara Smith

July 9, 2007

Melvin Hodgkiss, P.E., Director  
Surface Mining and Reclamation Division  
Railroad Commission of Texas  
1701 North Congress Avenue  
P. O. Box 12967  
Austin, TX 78711-2967

Dear Mr. Hodgkiss,

Goliad County Groundwater Conservation District has been closely monitoring groundwater quality and quantity in the vicinity of Uranium Energy Corporation's uranium exploration activities in Goliad County under Uranium Exploration Permit Number 123.

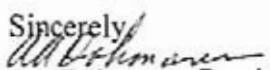
GCGCD initiated the taking of the first baseline water samples dating back to October 27, 2006. Since that date, GCGCD has tested and retested a large number of wells around and down-dip of the exploration activity. GCGCD identified three wells (data attached) with high radionuclides immediately down-dip of the exploration activity. It is noted that these wells had unacceptable levels of uranium decay products but uranium levels were very low or not detected.

In April 2007, five residences up-dip of the above noted exploration activities started experiencing water quality issues as noted in the attached report titled "Groundwater Quality", along with test data and photographs.

GCGCD would appreciate an evaluation and further investigation by the Railroad Commission of Texas of these conditions along with implementing appropriate action. GCGCD will continue its monitor and testing program and is available to provide additional assistance to the Commission.

By copy of this letter we invite the named landowners to write the Texas Railroad Commission a descriptive letter explaining their observations.

We are emailing you a PDF file of the "Evaluation of Potential Impacts Related to Proposed Uranium Mining in Goliad County, Texas" model prepared by Daniel B. Stephens & Associates, Inc. This model raises a number of questions about the suitability of the Gulf Coast Aquifer in the current uranium exploration area for exploration or mining uranium.

Sincerely,  
  
Art Dohmann, President

Goliad County Groundwater Conservation District

cc: J. B. Blackburn, Jr. Attorney

Steven G. Paulsgrove, Attorney

Uranium Research & Advisory Committee – Goliad County

Aldon Bade

Tom and Mary Anklam

Gene and Reta Brown

Craig Duderstadt

Ted Long

**RE: Groundwater Quality****May 30, 2007****June 1, 2007****June 26, 2007****July 5, 2007**

In the first two weeks of April 2007, Goliad County Groundwater Conservation District was advised of five individual residences that were experiencing plugged water filters and discolored water. These residences are in close proximity to each other in the Weser area and are all up-dip of the uranium exploration borehole drilling activity.

The uranium exploration activity by UEC started in July of 2006. The exploration borehole activity started in the Bluntzer Road area and progressed westward. The 4<sup>th</sup> quarter of 2006 and 1<sup>st</sup> quarter of 2007 saw extensive borehole drilling on the Abrameit, Stanford and Braquet properties which are adjacent to and down-dip of the above referenced five wells that experienced water problems.

Three of the wells at the Bade, Brown, and Anklam residences experienced a reddish coloration in their household water. The Long residence experienced a red deposit in the toilet bowl. Filters at the Bade, Anklam and Brown residences had a heavy reddish stain. At the Duderstadt residence, they experienced a high frequency of a plugged filter with a gray slimy residue and sand and iron residue in the filter bowl.

Unfiltered water from the above noted five wells was tested with samples taken on the following dates:

**Tom Anklam:**

12-18-06 by UEC

12-18-06 by GCGCD

4-26-07 by GCGCD

**Aldon Bade:**

12-19-06 by UEC

4-26-07 by GCGCD

**Reta Brown:**

1-3-07 by UEC

4-26-07 by GCGCD

Craig Duderstadt (new well):  
12-15-06 by UEC  
12-15-06 by GCGCD  
4-26-07 by GCGCD

Ted Long:  
12-18-06 by UEC  
12-18-06 by GCGCD  
4-26-07 by GCGCD

Comparing the test data of the last with the first samples taken yields the following observations:

Tom Anklam:  
Sulfate increased from 38 to 47 mg/L  
Sodium increased from 99 to 124 mg/L  
The filter had been recently changed. Analysis of water from the filter housing had a concentration of 5.55 mg/L iron.

Aldon Bade:  
Chloride increased from 178 to 190 mg/L  
Sulfate increased from 60 to 70 mg/L  
Iron increased from <.01 to 0.678 mg/L  
Sodium increased from 105 to 128 mg/L

Reta Brown:  
Iron increased from .03 to .056 mg/L

Craig Duderstadt:  
Chloride increased from 95 to 110 mg/L  
Sulfate increased from 27 to 42 mg/L  
Nitrate increased from 11 to 12.5 mg/L  
Calcium increased from 135 to 169 mg/L  
Sodium increased from 68 to 84 mg/L  
Magnesium increased from 8.3 to 9.22 mg/L

Ted Long:  
There were no significant changes

Exploration borehole drilling was discontinued the week of April 22, 2007, the same week that the last water samples were taken. By the end of April, 2007 the 5 residences reported that their water problems had stopped.

At the Craig Duderstadt residence there are two wells approximately 40 feet apart. The older shallow well is 70-80 feet in depth. The new well drilled in February, 2004 is 130 feet deep. The Duderstadt's were using the older (shallow) well for their domestic supply and the new well was used originally for oil and gas exploration and more recently for livestock supply. Both wells were sampled and tested on 12-15-06. Because of the better water quality of the deeper well, the Duderstadt's switched to the deeper well for their domestic use. During the taking of samples and other visits to observe their water problems, water levels were taken of the two wells.

They are as follows:

DATE	OLD WELL	DATE	NEW WELL
12-15-06	48' deep	3-29-07	59' deep
Early April, 2007	51' deep	4-15-07	58' deep
4-26-07	50.8' deep	5-2-07	52.8' deep
5-26-07	50.8' deep	5-26-07	52.55' deep
6-30-07	50.9' deep	6-30-07	53.0' deep

Along with a drastic change in water quality there was a significant to drastic change in water levels. The water level in the deeper well has shown a 5.45 foot recovery in one month since borehole drilling has stopped. The older well dropped three feet in level during extensive borehole drilling immediately down dip and has now stabilized.

What is the cause of this significant change in water quality and water level? There is insufficient data at this time to draw a definitive conclusion however future drilling and water quality and level changes will be closely monitored. One theory is that the increased boreholes acted as conduits to drain the water from the upper sands to the lower sands during the time that the boreholes were open before they were plugged. This draining of the water from the upper sands to the lower sands dropped the water level in a localized area causing a high localized flow at the five up dip wells that experienced water problems. This high flow brought with it dirty water that

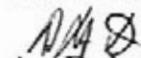
did not get cleansed in the sand aquifer as it would during normal lower flow velocities.

On May 3, 2007, Murphy Hawkins, Jr. Geologist with the Railroad Commission of Texas made a visit to the Duderstadt residence. He observed the dirty filters and filter bowl residue sample. He stated that the RRC had no jurisdiction.

June 25, 2007:

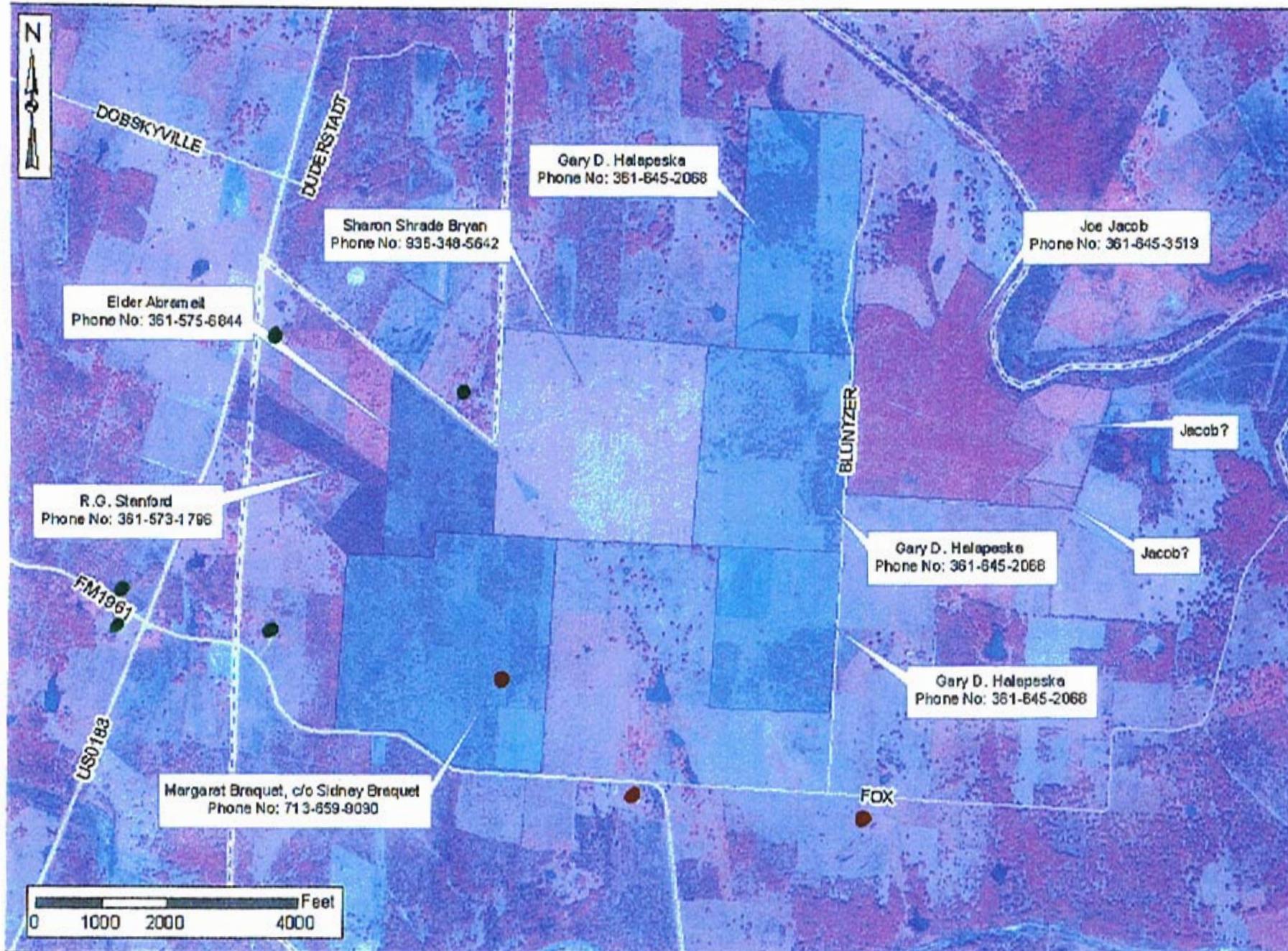
Exploration borehole drilling resumed around the middle of May 2007 and has increased some with 3-4 rigs currently in operation scattered around the exploration permit area.

A check with the residents of the five listed wells shows that the water discoloration and dirty filter issues have reappeared in the last two weeks. The severity at this time is less than that encountered in April 2007.



Art Dohmann, President, GCGCD

# JEC Uranium Exploration Permit No. 123 Landowners



• HIGH RADIONUCLIDES

**GPS locations for wells discussed in letter**

Craig Duderstadt - 28°52.528N 97°21.114W

Ted Long – 28°51.908N 97°21.716W

Thomas Anklam – 28°52.577N 97°21.741W

Reta Brown – 28°52.172N 97°22.435W

Aldon Bade – 28°51.954N 97°22.199W

Roman Bethke – 28°51.483N 97°20.631W

Sidney Braquet – 28°51.724N 97°20.950W

Paul Breedan, Jr. - 28°51.408N 97°19.975W

## GROUND WATER ANALYSIS REPORT-IN SITU MINING-URANIUM

COMPANY: URANIUM ENERGY CORPORATION

IDENTIFICATION: Reta Brown #1  
0850 1-3-07

LABORATORY: JORDAN LABORATORIES, INC.

REPORT DATE: February 14, 2007

## MAJOR AND SECONDARY CONSTITUENTS

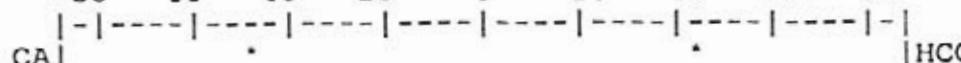
ITEM	MG/L	EPM	CONDUCTANCE	%EPM
CALCIUM(CA)	105	5.24	272.48	46.09
MAGNESIUM(MG)	19	1.56	72.70	13.72
SODIUM(NA)	103	4.48	219.07	39.40
POTASSIUM(K)	3.6	0.09	6.48	0.79
	TOTAL CATION	11.37		
CARBONATE(CO <sub>3</sub> )	0	0.00	0.00	0.00
BICARBONATE(HCO <sub>3</sub> )	303	4.97	216.69	45.93
SULFATE(SO <sub>4</sub> )	37	0.77	56.90	7.12
CHLORIDE(CL)	180	5.08	385.57	46.95
NITRATE(NO <sub>3</sub> -N)	1.6			
FLUORIDE(F)	0.57		TOTAL	1229.90
SILICA(SIO <sub>2</sub> )	38			
	TOTAL ANION	10.82		
TOTAL ION	791		ACCURACY CHECK	
			RANGE	
TDS(180 C)	693	ION	1.051	(.96 TO 1.04)
TOT ION-0.5 HCO <sub>3</sub> =	639	TDS	1.084	(.90 TO 1.10)
EC(25 C)	1110 UMHOS	EC	0.992	(.95 TO 1.05)
EC(DIL)= 97.6 X 12.5 =	1220 UMHOS			
ALK. AS CACO <sub>3</sub>	248		RADIATION-PICOCURRIES/LITER	
PH	7.35		GROSS ALPHA	+/-
			GROSS BETA	+/-
			RADIUM 226	0.4 +/- 0.1

## MINOR AND TRACE CONSTITUENTS

ITEM	MG/L	ITEM	MG/L	ITEM	MG/L
ARSENIC(AS)	0.002	MANGANESE(MN)	<0.01	VANADIUM(V)	
BARIUM(BA)		MERCURY(HG)	<0.0002	ZINC(ZN)	
CADMIUM(CD)	<0.0001	MOLY.(MO)	<0.1	BORON(B)	
CHROM.(CR)		NICKEL(NI)		AMMONIA-N	<0.1
COPPER(CU)		SELENIUM(SE)	0.002		
IRON(FE)	0.03	SILVER(AG)			
LEAD(PB)	<0.001	URANIUM(U)	0.002		

## %CATIONS %ANIONS

80 60 40 20 0 20 40 60 80

HCO<sub>3</sub> NOTE: QC Documentation

is on File at

Jordan Labs in

Corpus Christi, TX



CHECKED BY:

## B Environmental

2713 Houston Hwy  
Victoria, Texas 77901

ph:(361) 572-8224  
Fax:(361) 572 4115

B E Sample #: 105400  
Project Name: Brown  
Sample Location: Well  
Sample Date: 04/26/2007  
Sample Time: 10:22

Company: Goliad County Ground Water Dist.  
Contact: Art Dohmann  
Address: P O Box 562  
Goliad TX 77963-0562

	<u>results*</u>	<u>SDWA<sup>1</sup></u>	<u>Method</u>		<u>results*</u>	<u>SDWA<sup>1</sup></u>	<u>Method</u>
pH (units) <sup>3</sup>	6.85	6.5-8.5	SM 4500-H+B	Arsenic <sup>2</sup>	<0.02	0.050	EPA 200.7
Electrical Conductivity ( $\mu\text{mhos/cm}$ )	1,032	NECL	EPA 120.1	Barium <sup>2</sup>	0.094	2.000	EPA 200.7
Total Dissolved Solids <sup>3</sup>	516	500	by meter	Cadmium <sup>2</sup>	<0.002	0.005	EPA 200.7
Chloride <sup>3</sup>	184	250	EPA 325.3	Chromium <sup>2</sup>	<0.005	0.100	EPA 200.7
Fluoride <sup>2</sup>	0.8	4.0	Hach 8029	Copper <sup>2</sup>	0.006	1.300**	EPA 200.7
Nitrate <sup>2</sup>	1.0	10	Hach 8171	Iron <sup>3</sup>	0.056	0.300	EPA 200.7
Phosphate	0.37	NECL	Hach 8048	Lead <sup>2</sup>	<0.01	0.015**	EPA 200.7
Sulfate <sup>3</sup>	46	250	EPA 375.4	Mercury <sup>2</sup>	<0.0002	0.002	EPA 245.1
Total Hardness	332	NECL	SM 2340B	Selenium <sup>2</sup>	<0.03	0.050	EPA 200.7
				Silver <sup>3</sup>	<0.007	0.100	EPA 200.7
				Calcium	103	NECL	EPA 200.7
				Magnesium	18.1	NECL	EPA 200.7
				Sodium	118	NECL	EPA 200.7
				Aluminum <sup>3</sup>	<0.01	0.05-0.2	EPA 200.7

\* Results in mg/L (ppm), unless otherwise noted.

\*\* Action Level.

1 - Safe Drinking Water Act, Maximum Contaminant Level. Water supplied by municipal source.

2 - National Primary Drinking Water Standards (enforceable).

3 - National Secondary Drinking Water Standard (not enforceable).

NECL - No established contaminant level.

Approved By:

Kevin C. Baros  
General Manager

Test procedures used for this study were conducted in accordance with state and federal methods. However, the results contained on this report are for screening purposes only. If test results are outside of accepted SDWA guidelines, further testing may be requested. Contact your local county extension office or B Environmental with inquiries.

## GROUND WATER ANALYSIS REPORT-IN SITU MINING-URANIUM

COMPANY: URANIUM ENERGY CORPORATION  
 IDENTIFICATION: Aldon Bade #1 *HOUSE*  
 12/19/06 @ 1005 Hr.  
 LABORATORY: JORDAN LABORATORIES, INC.

REPORT DATE: JANUARY 26, 2007

## MAJOR AND SECONDARY CONSTITUENTS

ITEM	MG/L	EPM	CONDUCTANCE	%EPM
CALCIUM(CA)	110	5.49	285.48	46.88
MAGNESIUM(MG)	19	1.56	72.70	13.32
SODIUM(NA)	105	4.57	223.47	39.03
POTASSIUM(K)	3.6	0.09	6.48	0.77
		TOTAL CATION	11.71	

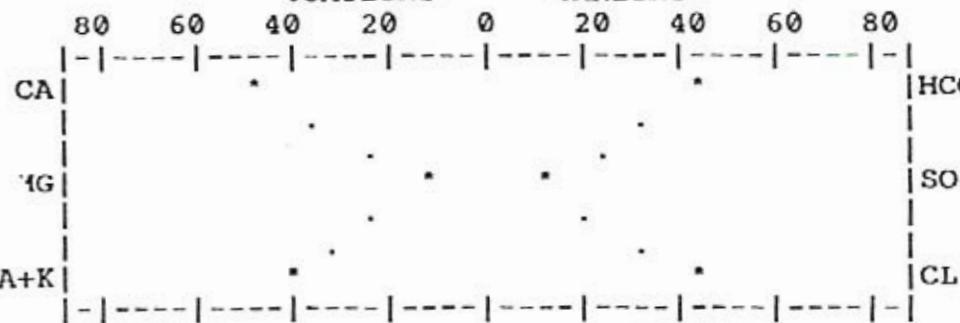
CARBONATE(CO <sub>3</sub> )	0	0.00	0.00	0.00
BICARBONATE(HCO <sub>3</sub> )	312	5.11	222.80	44.90
SULFATE(SO <sub>4</sub> )	60	1.25	92.38	10.98
CHLORIDE(CL)	178	5.02	381.02	44.11
NITRATE(NO <sub>3</sub> -N)	1.3			
FLUORIDE(F)	0.51		TOTAL	1284.32
SILICA(SIO <sub>2</sub> )	40			

TOTAL ION	829	TOTAL ANION	11.38	ACCURACY CHECK
TDS(180 C)	685			RANGE
TOT ION-0.5 HCO <sub>3</sub> =	673			ION 1.029 (.96 TO 1.04)
EC(25 C)	1160 UMHOS			TDS 1.017 (.90 TO 1.10)
EC(DIL)=103.2 X 12.5 =	1290 UMHOS			EC 1.004 (.95 TO 1.05)
ALK. AS CACO <sub>3</sub>	256			RADIATION-PICOCURIES/LITER
PH	7.39			GROSS ALPHA +/-
				GROSS BETA +/-
				RADIUM 226 0.6 +/- 0.1

## MINOR AND TRACE CONSTITUENTS

ITEM	MG/L	ITEM	MG/L	ITEM	MG/L
ARSENIC(AS)	0.002	MANGANESE(MN)	<0.01	VANADIUM(V)	
BARIUM(BA)		MERCURY(HG)	<0.0002	ZINC(ZN)	
CADMUM(CD)	<0.0001	MOLY.(MO)	<0.1	BORON(B)	
CHROM.(CR)		NICKEL(NI)		AMMONIA-N	<0.1
COPPER(CU)		SELENIUM(SE)	0.001		
IRON(Fe)	<0.01	SILVER(AG)			
LEAD(PB)	<0.001	URANIUM(U)	0.002		

## %CATIONS %ANIONS



NOTE: QC Documentation  
is on File at  
Jordan Labs in  
Corpus Christi, TX

CHECKED BY:

*AK*

2713 Houston Hwy  
Victoria, Texas 77901

## B Environmental

ph:(361) 572-8224  
Fax:(361) 572 4115

B E Sample #: 105399  
Project Name: Bade  
Sample Location: Well  
Sample Date: 04/26/2007  
Sample Time: 10:10

Company: Goliad County Ground Water Dist.  
Contact: Art Dohmann  
Address: P O Box 562  
Goliad TX 77963-0562

	<u>results*</u>	<u>SDWA<sup>1</sup></u>	<u>Method</u>		<u>results*</u>	<u>SDWA<sup>1</sup></u>	<u>Method</u>
pH (units) <sup>3</sup>	6.85	6.5-8.5	SM 4500-H+B		Arsenic <sup>2</sup>	<0.02	0.050 EPA 200.7
Electrical Conductivity ( $\mu\text{mhos/cm}$ )	1,134	NECL	EPA 120.1		Barium <sup>2</sup>	0.070	2.000 EPA 200.7
Total Dissolved Solids <sup>3</sup>	566	500	by meter		Cadmium <sup>2</sup>	<0.002	0.005 EPA 200.7
Chloride <sup>3</sup>	190	250	EPA 325.3		Chromium <sup>2</sup>	<0.005	0.100 EPA 200.7
Fluoride <sup>2</sup>	0.6	4.0	Hach 8029		Copper <sup>2</sup>	<0.005	1.300** EPA 200.7
Nitrate <sup>2</sup>	0.9	10	Hach 8171		Iron <sup>3</sup>	0.678	0.300 EPA 200.7
Phosphate	0.39	NECL	Hach 8048		Lead <sup>2</sup>	<0.01	0.015** EPA 200.7
Sulfate <sup>3</sup>	70	250	EPA 375.4		Mercury <sup>2</sup>	<0.0002	0.002 EPA 245.1
Total Hardness	370	NECL	SM 2340B		Selenium <sup>2</sup>	<0.03	0.050 EPA 200.7
					Silver <sup>3</sup>	<0.007	0.100 EPA 200.7
					Calcium	117	NECL EPA 200.7
					Magnesium	19.0	NECL EPA 200.7
					Sodium	128	NECL EPA 200.7
					Aluminum <sup>3</sup>	<0.01	0.05-0.2 EPA 200.7

\* Results in mg/L (ppm), unless otherwise noted.

\*\* Action Level.

1 - Safe Drinking Water Act, Maximum Contaminant Level. Water supplied by municipal source.

2 - National Primary Drinking Water Standards (enforceable).

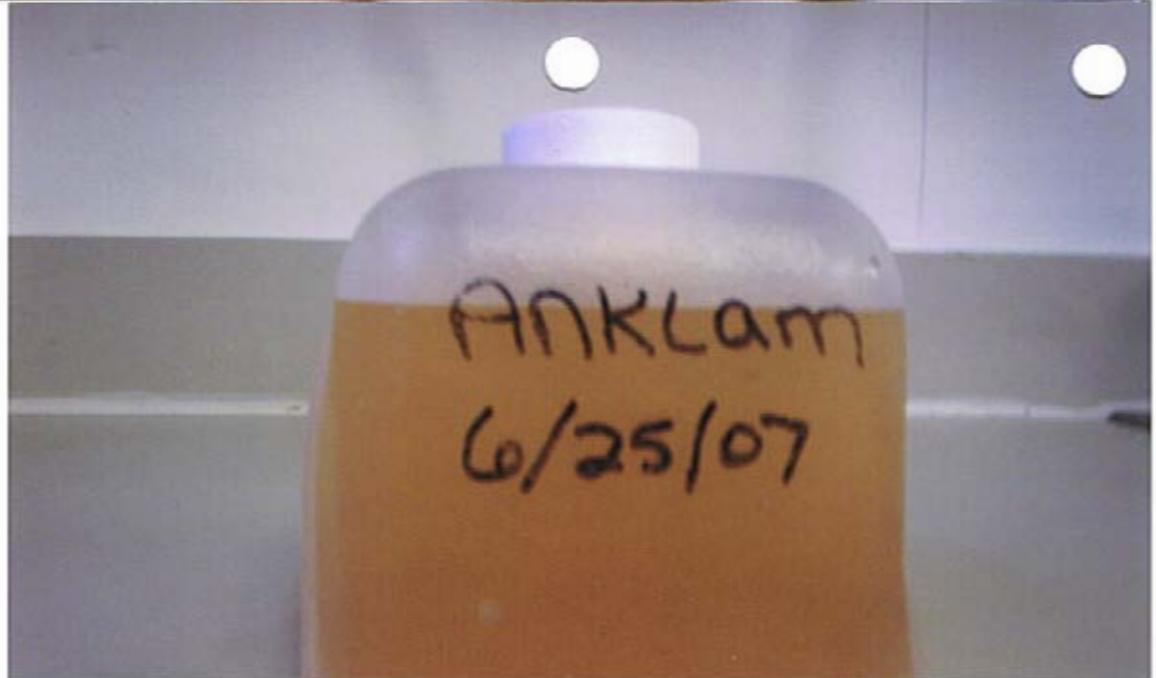
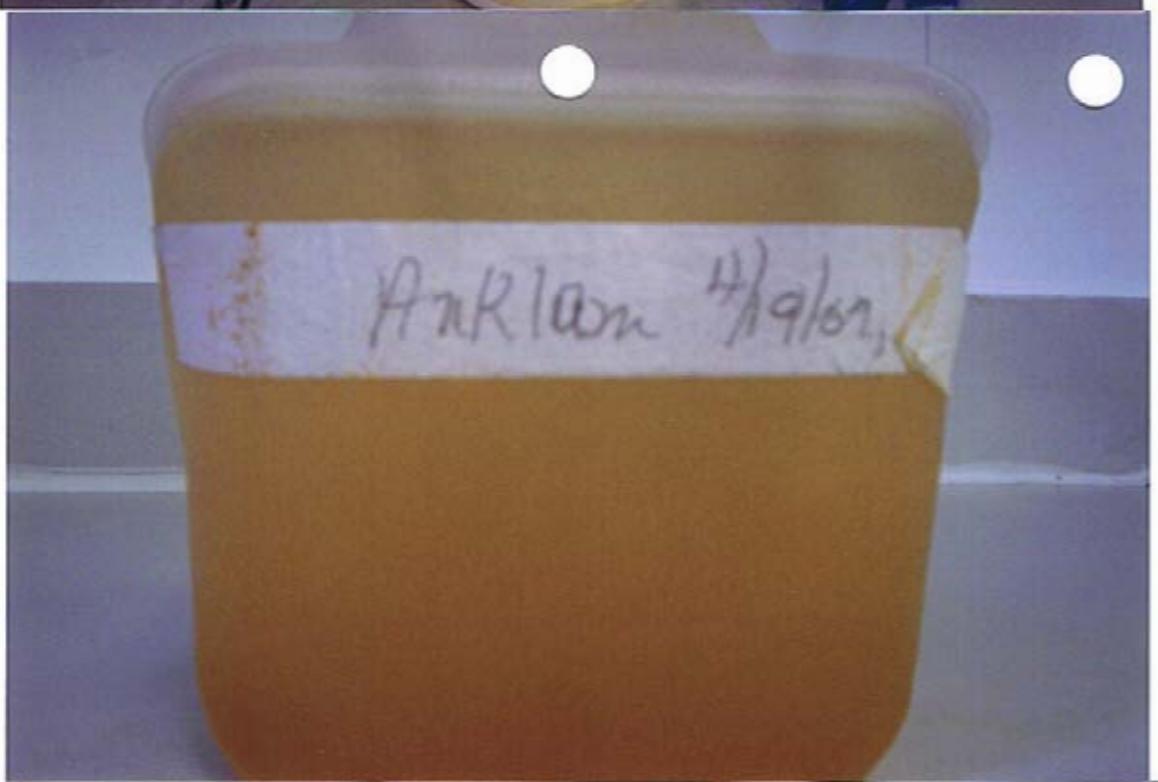
3 - National Secondary Drinking Water Standard (not enforceable).

NECL - No established contaminant level.

Approved By:

Kevin C. Baros  
General Manager

Test procedures used for this study were conducted in accordance with state and federal methods. However, the results contained on this report are for screening purposes only. If test results are outside of accepted SDWA guidelines, further testing may be requested. Contact your local county extension office or B Environmental with inquiries.



## LABORATORY ANALYTICAL REPORT

Client: San Antonio River Authority  
 Project: Bexar County Water Study  
 Lab ID: C06120920-003  
 Client Sample ID: AA18479B-G Well 11 *Bakken House well*

Report Date: 01/17/07  
 Collection Date: 12/18/06 12:10  
 Date Received: 12/20/06  
 Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Data / By
<b>MAJOR IONS</b>							
Chloride	129	mg/L		1	A4500-Cl B	12/27/06 11:18 /	
Sulfate	42	mg/L		1	A4500-SO4 E	12/26/06 10:42 /	
<b>PHYSICAL PROPERTIES</b>							
Conductivity	998	umhos/cm		1.0	A2510 B	12/23/06 16:06 /	
pH	7.61	s.u.		0.01	A4500-H B	12/23/06 16:08 /	
Solids, Total Dissolved TDS @ 180 C	562	mg/L		10	A2540 C	12/23/06 18:21 /	
<b>METALS - TOTAL</b>							
Arsenic	0.001	mg/L		0.001	E200.8	12/28/06 15:10 / bas	
Selenium	0.005	mg/L		0.001	E200.8	12/29/06 15:10 / bas	
Uranium	0.0032	mg/L		0.0003	E200.8	12/29/06 15:10 / bas	
<b>RADIONUCLIDES - TOTAL</b>							
Gross Alpha	7.0	pCi/L		1.0	E900.0	01/06/07 11:50 / res	
Gross Alpha precision ( $\pm$ )	0.7	pCi/L			E900.0	01/06/07 11:50 / res	
Gross Beta	6.1	pCi/L		2.0	E900.0	01/06/07 11:50 / res	
Gross Beta precision ( $\pm$ )	1.5	pCi/L			E900.0	01/06/07 11:50 / res	
Radium 226	ND	pCi/L		0.2	E903.0	01/14/07 13:32 / res	
Radium 228	ND	pCi/L		1.0	RA-05	01/08/07 11:37 / plj	
Radon 222	378	pCi/L	H	100	D5072-B2	12/26/06 12:10 / dpb	
Radon 222 precision ( $\pm$ )	149	pCi/L	H		D5072-B2	12/26/06 12:10 / dpb	

Report Definitions: RL - Analyte reporting limit.  
 QCL - Quality control limit.  
 H - Analysis performed past recommended holding time.

MCL - Maximum contaminant level  
 ND - Not detected at the reporting limit.

## B Environmental

2713 Houston Hwy  
Victoria, Texas 77901

ph:(361) 572-8224  
Fax:(361) 572 4115

8 E Sample #: 105401  
Project Name Anklam  
Sample Location: Well  
Sample Date: 04/26/2007  
Sample Time: 10:44

Company: Goliad County Ground Water Dist.  
Contact: Art Dohmann  
Address: P O Box 562  
Goliad TX 77963-0562

	<u>results*</u>	<u>SDWA<sup>1</sup></u>	<u>Method</u>		<u>results*</u>	<u>SDWA<sup>1</sup></u>	<u>Method</u>
pH (units) <sup>3</sup>	6.92	6.5-8.5	SM 4500-H+B	Arsenic <sup>2</sup>	<0.02	0.050	EPA 200.7
Electrical Conductivity ( $\mu\text{mhos/cm}$ )	933	NECL	EPA 120.1	Barium <sup>2</sup>	0.090	2 000	EPA 200.7
Total Dissolved Solids <sup>3</sup>	467	500	by meter	Cadmium <sup>2</sup>	<0.002	0.005	EPA 200.7
Chloride <sup>3</sup>	132	250	EPA 325.3	Chromium <sup>2</sup>	<0.005	0.100	EPA 200.7
Fluoride <sup>2</sup>	0.6	4.0	Hach 8029	Copper <sup>2</sup>	<0.005	1 300**	EPA 200.7
Nitrate <sup>2</sup>	1.2	10	Hach 8171	Iron <sup>3</sup>	<0.01	0.300	EPA 200.7
Phosphate	0.38	NECL	Hach 8048	Lead <sup>2</sup>	<0.01	0.015**	EPA 200.7
Sulfate <sup>3</sup>	47	250	EPA 375.4	Mercury <sup>2</sup>	<0.0002	0.002	EPA 245.1
Total Hardness	301	NECL	SM 2340B	Selenium <sup>2</sup>	<0.03	0.050	EPA 200.7
				Silver <sup>3</sup>	<0.007	0.100	EPA 200.7
				Calcium	93.3	NECL	EPA 200.7
				Magnesium	16.6	NECL	EPA 200.7
				Sodium	124	NECL	EPA 200.7
				Aluminum <sup>3</sup>	<0.01	0.05-0.2	EPA 200.7

\* Results in mg/L (ppm), unless otherwise noted.

\*\* Action Level.

1 - Safe Drinking Water Act, Maximum Contaminant Level. Water supplied by municipal source.

2 - National Primary Drinking Water Standards (enforceable).

3 - National Secondary Drinking Water Standard (not enforceable).

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Approved By:

Kevin C. Baros  
General Manager

Test procedures used for this study were conducted in accordance with state and federal methods. However, the results contained on this report are for screening purposes only. If test results are outside of accepted SDWA guidelines, further testing may be requested. Contact your local county extension office or B Environmental with inquiries.

## B ENVIRONMENTAL

2713 Houston Hwy.

Victoria, TX 77901

(361)572-8224

**REPORT OF SAMPLE ANALYSIS**

**TO:** Goliad County Ground Water Dist.  
 Art Dohmann  
 P O Box 562  
 Goliad, TX 77963-0562

*Client Information**Laboratory Information*

Project:	Anklam	LAB Sample #	105402
Sample ID:	House Filter	Date Received:	04/26/07
Date Taken:	04/26/07	Time Received:	13:00
Time Taken:	10.44	Report Date	05/17/07

Parameter	Result	Units	RL	Blank	Run By	LCS	MS	MSD
<b>ICP Metal Scan: Method SW 6010B / EPA 245.1</b>								
Silver	<0.007	mg/L	0.007	<0.007	WEW	110	N/A	N/A
Aluminum	1.07	mg/L	0.01	<0.01	WEW	102	N/A	N/A
Arsenic	<0.05	mg/L	0.02	<0.02	WEW	106	N/A	N/A
Barium	0.109	mg/L	0.007	<0.007	WEW	111	N/A	N/A
Beryllium	<0.005	mg/L	0.002	<0.002	WEW	104	N/A	N/A
Calcium	96.5	mg/L	0.05	<0.05	WEW	113	N/A	N/A
Cadmium	<0.002	mg/L	0.002	<0.002	WEW	104	N/A	N/A
Cobalt	<0.005	mg/L	0.005	<0.005	WEW	102	N/A	N/A
Chromium	0.010	mg/L	0.005	<0.005	WEW	101	N/A	N/A
Copper	0.040	mg/L	0.005	<0.005	WEW	102	N/A	N/A
Iron	5.55	mg/L	0.01	<0.01	WEW	111	N/A	N/A
Potassium	3.41	mg/L	1.0	<1.0	WEW	111	N/A	N/A
Magnesium	16.2	mg/L	0.01	<0.01	WEW	113	N/A	N/A
Manganese	0.026	mg/L	0.005	<0.005	WEW	99.4	N/A	N/A
Molybdenum	<0.01	mg/L	0.007	<0.007	WEW	99.3	N/A	N/A
Sodium	120	mg/L	1.0	<1.0	WEW	115	N/A	N/A
Nickel	<0.007	mg/L	0.007	<0.007	WEW	97.1	N/A	N/A
Lead	<0.01	mg/L	0.01	<0.01	WEW	102	N/A	N/A
Antimony	<0.005	mg/L	0.005	<0.005	WEW	101	N/A	N/A
Selenium	<0.03	mg/L	0.03	<0.03	WEW	102	N/A	N/A
Thallium	<0.02	mg/L	0.03	<0.03	WEW	99.3	N/A	N/A
Vanadium	0.052	mg/L	0.005	<0.005	WEW	102	N/A	N/A
Zinc	0.128	mg/L	0.005	<0.005	WEW	104	N/A	N/A

## Method References:

Black, C.A. et al (ed.) Methods of Soil Analysis, 1965

SM- Standard Methods for the Examination of Water &amp; Wastewater, 18th Ed , 1992

SM- Standard Methods for the Examination of Water &amp; Wastewater, 18th Ed , 1992

SW- EPA Test Methods for Evaluating Solid Waste, SW-846 3rd Edition, 1986

U.S. Department of Agriculture Handbook No. 60

## Approved By:

Kevin C. Baros  
General Manager

## LABORATORY ANALYTICAL REPORT

Client: San Antonio River Authority  
 Project: Bexar County Water Study  
 Lab ID: C08120920-005  
 Client Sample ID: AA18481B-G Well 13

Report Date: 01/17/07  
 Collection Date: 12/18/06 14:15  
 Date Received: 12/20/06  
 Matrix: Aqueous

*818 Eellid Ave  
Austin 78709  
Braguet Southwell*

Analyses	Result	Units	Qualifiers	RL	MCL/QCL	Method	Analysis Date / By
<b>MAJOR IONS</b>							
Chloride	161	mg/L		1	A4500-Cl B	12/27/06 11:20 / JI	
Sulfate	60	mg/L		1	A4500-SO4 E	12/28/06 10:47 / JI	
<b>PHYSICAL PROPERTIES</b>							
Conductivity	1140	µmhos/cm		1.0	A2510 B	12/22/06 14:29 / ja	
pH	7.56	s.u.		0.01	A4500-H B	12/22/06 14:29 / ja	
Solids, Total Dissolved TDS @ 180 C	816	mg/L		10	A2540 C	12/22/06 14:05 / lh	
<b>METALS - TOTAL</b>							
Arsenic	0.002	mg/L		0.001	E200.6	12/28/06 18:53 / bas	
Selenium	0.018	mg/L	D	0.002	E200.6	12/29/06 18:53 / bas	
Uranium	ND	mg/L		0.0003	E200.6	12/29/06 18:53 / bas	
<b>RADIONUCLIDES - TOTAL</b>							
Gross Alpha	70.3	pCi/L		1.0	E900.0	01/06/07 11:50 / res	
Gross Alpha precision (±)	1.4	pCi/L			E900.0	01/06/07 11:50 / res	
Gross Beta	28.0	pCi/L		2.0	E900.0	01/06/07 11:50 / res	
Gross Beta precision (±)	1.8	pCi/L			E900.0	01/06/07 11:50 / res	
Radium 226	28.6	pCi/L		0.2	E903.0	01/14/07 15:33 / tra	
Radium 226 precision (±)	1.8	pCi/L			E903.0	01/14/07 15:33 / tra	
Radium 228	ND	pCi/L		1.0	RA-05	01/08/07 11:37 / pII	
Radon 222	14700	pCi/L	H	100	D5072-92	12/28/06 12:10 / dpb	
Radon 222 precision (±)	288	pCi/L	H		D5072-92	12/28/06 12:10 / dpb	

e

*Leased to County  
4141 Karne Rd  
Bexar 78779-963  
645-3959*

Report Definitions: RL - Analyte reporting limit.  
 QCL - Quality control limit.  
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.  
 ND - Not detected at the reporting limit.  
 H - Analysis performed past recommended holding time.

## LABORATORY ANALYTICAL REPORT

Client: San Antonio River Authority  
 Project: Galveston County Water Study  
 Lab ID: C06120920-007  
 Client Sample ID: AA18483B-G Well 15

Report Date: 01/17/07  
 Collection Date: 12/18/06 15:45  
 Date Received: 12/20/06  
 Matrix: Aqueous

*Breedon Horse Well  
 11 Stirrup Trail, TX 77955*

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>MAJOR IONS</b>							
Chloride	129	mg/L		1		A4500-Cl B	12/27/06 11:23 / jg
Sulfate	38	mg/L		1		A4500-SO4 E	12/26/06 10:51 / jj
<b>PHYSICAL PROPERTIES</b>							
Conductivity	928	μmhos/cm		1.0		A2510 B	12/22/06 14:38 / ja
pH	7.35	s.u.		0.01		A4500-H B	12/22/06 14:38 / ja
Solids, Total Dissolved TDS @ 180 C	572	mg/L		10		A2540 C	12/22/06 14:07 / lh
<b>METALS - TOTAL</b>							
Arsenic	0.010	mg/L		0.001		E200.8	12/29/06 19:06 / bas
Selenium	0.015	mg/L		0.001		E200.8	12/29/06 19:06 / bas
Uranium	0.0064	mg/L		0.0003		E200.8	12/29/06 19:06 / bas
<b>RADIONUCLIDES - TOTAL</b>							
Gross Alpha	40.0	pCi/L		1.0		E900.0	01/06/07 11:51 / res
Gross Alpha precision (±)	1.2	pCi/L				E900.0	01/06/07 11:51 / res
Gross Beta	13.1	pCi/L		2.0		E900.0	01/06/07 11:51 / res
Gross Beta precision (±)	1.8	pCi/L				E900.0	01/06/07 11:51 / res
Radium 226	12.0	pCi/L		0.2		E903.0	01/14/07 17:27 / tra
Radium 226 precision (±)	1.2	pCi/L				E903.0	01/14/07 17:27 / tra
Radium 228	ND	pCi/L		1.0		RA-05	01/08/07 11:37 / pj
Radon 222	3150	pCi/L	H	100		D5072-92	12/26/06 12:10 / dpb
Radon 222 precision (±)	179	pCi/L	H			D5072-92	12/26/06 12:10 / dpb

Report Definitions: RL - Analyte reporting limit.  
 QCL - Quality control limit.  
 H - Analysis performed past recommended holding time.

MCL - Maximum contaminant level.  
 ND - Not detected at the reporting limit.

## LABORATORY ANALYTICAL REPORT

**Client:** San Antonio River Authority  
**Project:** Goliad County Water Study  
**Lab ID:** C06120920-008  
**Client Sample ID:** AA18482B-G Well 14

**Report Date:** 01/17/07  
**Collection Date:** 12/18/06 14:50  
**Date Received:** 12/20/06  
**Matrix:** Aqueous

*Bethke Keel*

Analytes	Result	Units	Qualifiers	RL	MCL/QCL	Method	Analysis Date / By
<b>MAJOR IONS</b>							
Chloride	403	mg/L		1	A4500-Cl B	12/27/06 11:21 / j	
Sulfate	107	mg/L	D	1	A4500-SO4 E	12/26/06 10:49 / JI	
<b>PHYSICAL PROPERTIES</b>							
Conductivity	2040	umhos/cm		1.0	A2510-B	12/22/06 14:32 / ja	
pH	7.48	a.u.		0.01	A4500-H B	12/22/06 14:32 / ja	
Solids, Total Dissolved TDS @ 180 C	1210	mg/L		10	A2540-C	12/22/06 14:06 / th	
<b>METALS - TOTAL</b>							
Arsenic	ND	mg/L		0.001	E200.8	12/29/06 19:01 / bas	
Selenium	0.006	mg/L		0.001	E200.8	12/29/06 19:01 / bas	
Uranium	0.0006	mg/L		0.0003	E200.8	12/29/06 19:01 / bas	
<b>RADIOMINUCIDES - TOTAL</b>							
Gross Alpha	189	pCi/L		1.0	E900.0	01/07/07 04:47 / res	
Gross Alpha precision ( $\pm$ )	2.4	pCi/L			E900.0	01/07/07 04:47 / res	
Gross Beta	62.2	pCi/L		2.0	E900.0	01/07/07 04:47 / res	
Gross Beta precision ( $\pm$ )	2.8	pCi/L			E900.0	01/07/07 04:47 / res	
Radium 226	98.2	pCi/L		0.2	E903.0	01/14/07 16:27 / res	
Radium 226 precision ( $\pm$ )	3.4	pCi/L			E903.0	01/14/07 16:27 / res	
Radium 228	ND	pCi/L		1.0	RA-06	01/08/07 11:37 / pl	
Radon 222	17200	pCi/L	H	100	D5072-92	12/28/06 12:10 / dpb	
Radon 222 precision ( $\pm$ )	298	pCi/L	H		D5072-92	12/26/06 12:10 / dpb	

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit

D - RL increased due to sample matrix interference.

**MCL** - Maximum contaminant level.  
**ND** - Not detected at the reporting limit.  
**H** - Analysis performed past recommended holding time

Auderstadt 4/2/07



## LABORATORY ANALYTICAL REPORT

Client: San Antonio River Authority  
 Project: Goliad Groundwater Study  
 Lab ID: C06120717-006  
 Client Sample ID: AA18372 B-G Well 6 *Lizy Duderstadt-Stephens*

Report Date: 01/06/07  
 Collection Date: 12/15/06 10:00  
 Date Received: 12/16/06  
 Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/QCL	Method	Analysis Date / By
<b>MAJOR IONS</b>							
Alkalinity, Total as CaCO <sub>3</sub>	341	mg/L		1	A2320 B	12/16/06 09:16 / ja	
Carbonate as CO <sub>3</sub>	ND	mg/L		1	A2320 B	12/16/06 09:16 / ja	
Bicarbonate as HCO <sub>3</sub>	416	mg/L		1	A2320 B	12/16/06 09:16 / ja	
Hydroxide as OH	ND	mg/L		1	A2320 B	12/16/06 09:16 / ja	
Calcium	142	mg/L		0.5	E200.7	01/02/07 17:48 / cp	
Chloride	128	mg/L		1	E200.7	01/02/07 16:06 / cp	
Magnesium	7.9	mg/L		0.5	E200.7	01/02/07 17:48 / cp	
Potassium	2.02	mg/L	D	0.08	E200.7	01/02/07 17:48 / cp	
Silica	32.0	mg/L		0.1	E200.7	01/02/07 16:06 / cp	
Sodium	60.5	mg/L		0.5	E200.7	01/02/07 17:48 / cp	
Sulfate	27	mg/L		1	E200.7	01/02/07 17:48 / cp	
<b>PHYSICAL PROPERTIES</b>							
Conductivity	1070	µmhos/cm		1.0	A2510 B	12/16/06 11:30 / ji	
<b>SOLIDS, TOTAL DISSOLVED - CALCULATED</b>							
Solids, Total Dissolved Calculated	800	mg/L			Calculation	01/08/07 09:32 / dab	
<b>METALS - TOTAL</b>							
Antimony	0.003	mg/L		0.001	E200.8	12/16/06 21:13 / bas	
Cadmium	ND	mg/L		0.0005	E200.8	12/16/06 21:13 / bas	
Iron	ND	mg/L		0.03	E200.7	01/02/07 17:48 / cp	
Lead	ND	mg/L		0.001	E200.8	12/16/06 21:13 / bas	
Manganese	ND	mg/L		0.001	E200.8	12/16/06 21:13 / bas	
Mercury	ND	mg/L		0.0005	E200.8	12/16/06 21:13 / bas	
Molybdenum	ND	mg/L		0.001	E200.8	12/16/06 21:13 / bas	
Selenium	0.004	mg/L		0.001	E200.8	12/16/06 21:13 / bas	
Uranium	0.0045	mg/L		0.0003	E200.8	12/16/06 21:13 / bas	
<b>RADIONUCLIDES - TOTAL</b>							
Gross Alpha	3.7	pCi/L		1.0	E900.0	12/31/06 00:58 / res	
Gross Alpha precision (±)	0.5	pCi/L			E900.0	12/31/06 00:58 / res	
Radium 226	0.4	pCi/L		0.2	E903.0	01/02/07 13:27 / res	
Radium 226 precision (±)	0.3	pCi/L			E903.0	01/02/07 13:27 / res	
Radium 228	ND	pCi/L		1.0	RA-05	12/28/06 17:49 / pj	
Radon 222	105	pCi/L		100	D5072-92	12/16/06 12:19 / dpb	
Radon 222 precision (±)	58.1	pCi/L			D5072-92	12/16/06 12:18 / dpb	

Report: RL - Analyte reporting limit.

Definitions: QCL - Quality control limit.

D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.

## B Environmental

2713 Houston Hwy  
Victoria, Texas 77901

ph:(361) 572-8224  
Fax:(361) 572-4115

B E Sample #: 105403  
Project Name: Duderstadt  
Sample Location: Well  
Sample Date: 04/26/2007  
Sample Time: 11:05

Company: Goliad County Ground Water Dist  
Contact: Art Dohmann  
Address: P O Box 562  
Goliad TX 77963-0562

	<u>results*</u>	<u>SDWA<sup>1</sup></u>	<u>Method</u>		<u>results*</u>	<u>SDWA<sup>1</sup></u>	<u>Method</u>
pH (units) <sup>3</sup>	6.62	6.5-8.5	SM 4500-H+B	Arsenic <sup>2</sup>	<0.02	0.050	EPA 200.7
Electrical Conductivity ( $\mu$ mhos/cm)	1,055	NECL	EPA 120.1	Barium <sup>2</sup>	0.399	2 000	EPA 200.7
Total Dissolved Solids <sup>3</sup>	527		by meter	Cadmium <sup>2</sup>	<0.002	0.005	EPA 200.7
Chloride <sup>3</sup>	110	500	EPA 325.3	Chromium <sup>2</sup>	<0.005	0.100	EPA 200.7
Fluoride <sup>2</sup>	0.3	250	Hach 8029	Copper <sup>2</sup>	<0.005	1 300**	EPA 200.7
Nitrate <sup>2</sup>	12.5	4.0	Hach 8171	Iron <sup>3</sup>	<0.01	0.300	EPA 200.7
Phosphate	0.30	NECL	Hach 8048	Lead <sup>2</sup>	<0.01	0.015**	EPA 200.7
Sulfate <sup>3</sup>	42	250	EPA 375.4	Mercury <sup>2</sup>	<0.002	0.002	EPA 245.1
Total Hardness	460	NECL	SM 2340B	Selenium <sup>2</sup>	<0.03	0.050	EPA 200.7
				Silver <sup>3</sup>	<0.007	0.100	EPA 200.7
				Calcium	169	NECL	EPA 200.7
				Magnesium	9.22	NECL	EPA 200.7
				Sodium	84.0	NECL	EPA 200.7
				Aluminum <sup>3</sup>	<0.01	0.05-0.2	EPA 200.7

\* Results in mg/L (ppm), unless otherwise noted.

\*\* Action Level.

1 - Safe Drinking Water Act, Maximum Contaminant Level. Water supplied by municipal source.

2 - National Primary Drinking Water Standards (enforceable).

3 - National Secondary Drinking Water Standard (not enforceable).

NECL - No established contaminant level.

Approved By:

  
Kevin C. Baros  
General Manager

Test procedures used for this study were conducted in accordance with state and federal methods. However, the results contained on this report are for screening purposes only. If test results are outside of accepted SDWA guidelines, further testing may be requested. Contact your local county extension office or B Environmental with inquiries.

## B ENVIRONMENTAL

2713 Houston Hwy

Victoria, TX 77901

(361)572-8224

## REPORT OF SAMPLE ANALYSIS

TO: Goliad County Ground Water Dist.  
 Art Dohmann  
 P O Box 562  
 Goliad, TX 77963-0562

Client Information				Laboratory Information				
Project:	Duderstadt	Units	RL	LAB Sample #	105404	MS	MSD	
Sample ID:	Filter			Date Received:	04/26/07			
Date Taken:	04/26/07			Time Received:	13:00			
Time Taken:	11:00			Report Date:	05/17/07			
Parameter	Result	Units	RL	Blank	Run By	LCS	MS	MSD
<b>ICP Metal Scan: Method SW 6010B / EPA 245.1</b>								
Silver	<0.007	mg/L	0.007	<0.007	WEW	108	N/A	N/A
Aluminum	0.01	mg/L	0.01	<0.01	WEW	104	N/A	N/A
Arsenic	<0.02	mg/L	0.02	<0.02	WEW	104	N/A	N/A
Barium	0.389	mg/L	0.007	<0.007	WEW	108	N/A	N/A
Beryllium	<0.002	mg/L	0.002	<0.002	WEW	101	N/A	N/A
Calcium	166	mg/L	0.05	<0.05	WEW	111	N/A	N/A
Cadmium	<0.002	mg/L	0.002	<0.002	WEW	102	N/A	N/A
Cobalt	<0.005	mg/L	0.005	<0.005	WEW	100	N/A	N/A
Chromium	<0.005	mg/L	0.005	<0.005	WEW	99.2	N/A	N/A
Copper	<0.005	mg/L	0.005	<0.005	WEW	101	N/A	N/A
Iron	0.45	mg/L	0.01	<0.01	WEW	108	N/A	N/A
Potassium	2.02	mg/L	1.0	<1.0	WEW	113	N/A	N/A
Magnesium	8.99	mg/L	0.01	<0.01	WEW	109	N/A	N/A
Manganese	<0.005	mg/L	0.005	<0.005	WEW	98	N/A	N/A
Molybdenum	<0.007	mg/L	0.007	<0.007	WEW	96.4	N/A	N/A
Sodium	78.1	mg/L	1.0	<1.0	WEW	113	N/A	N/A
Nickel	<0.007	mg/L	0.007	<0.007	WEW	95.2	N/A	N/A
Lead	<0.01	mg/L	0.01	<0.01	WEW	99.5	N/A	N/A
Antimony	<0.005	mg/L	0.005	<0.005	WEW	98.1	N/A	N/A
Selenium	<0.03	mg/L	0.03	<0.03	WEW	104	N/A	N/A
Thallium	<0.02	mg/L	0.03	<0.03	WEW	97.1	N/A	N/A
Vanadium	0.051	mg/L	0.005	<0.005	WEW	102	N/A	N/A
Zinc	0.017	mg/L	0.005	<0.005	WEW	101	N/A	N/A

## Method References.

Black, C.A. et al (ed.) Methods of Soil Analysis, 1965

SM- Standard Methods for the Examination of Water &amp; Wastewater, 18th Ed., 1992

SM- Standard Methods for the Examination of Water &amp; Wastewater, 18th Ed., 1992

Test Methods for Evaluating Solid Waste, SW-846 3rd Edition, 1986

Department of Agriculture Handbook No. 60

## Approved By:

Kevin C. Baros  
General Manager

## B ENVIRONMENTAL

2713 Houston Hwy.

Victoria, TX 77901

(361)572-8224

**REPORT OF SAMPLE ANALYSIS**

**TO:** Goliad County Ground Water Dist.  
 Art Dohmann  
 P O Box 562  
 Goliad, TX 77963-0562

Client Information				Laboratory Information				
Project:	Duderstadt	LAB Sample #	105405					
Sample ID:	Sediment	Date Received:	04/26/07					
Date Taken:		Time Received:	13:00					
Time Taken		Report Date:	05/17/07					
Parameter	Result	Units	RL	Blank	Run By	LCS	MS	MSD
<b>ICP Metal Scan: Method SW 6010B / EPA 245.1</b>								
Silver	<0.007	mg/L	0.007	<0.007	WEW	108	N/A	N/A
Aluminum	1.35	mg/L	0.01	<0.01	WEW	104	N/A	N/A
Arsenic	<0.02	mg/L	0.02	<0.02	WEW	104	N/A	N/A
Barium	0.344	mg/L	0.007	<0.007	WEW	108	N/A	N/A
Beryllium	<0.002	mg/L	0.002	<0.002	WEW	101	N/A	N/A
Calcium	95.0	mg/L	0.05	<0.05	WEW	111	N/A	N/A
Cadmium	<0.002	mg/L	0.002	<0.002	WEW	102	N/A	N/A
Cobalt	<0.005	mg/L	0.005	<0.005	WEW	100	N/A	N/A
Chromium	0.029	mg/L	0.005	<0.005	WEW	99.2	N/A	N/A
Copper	0.185	mg/L	0.005	<0.005	WEW	101	N/A	N/A
Iron	24.8	mg/L	0.01	<0.01	WEW	108	N/A	N/A
Potassium	2.11	mg/L	1.0	<1.0	WEW	113	N/A	N/A
Magnesium	8.17	mg/L	0.01	<0.01	WEW	109	N/A	N/A
Manganese	0.109	mg/L	0.005	<0.005	WEW	98	N/A	N/A
Molybdenum	<0.007	mg/L	0.007	<0.007	WEW	96.4	N/A	N/A
Sodium	68.6	mg/L	1.0	<1.0	WEW	113	N/A	N/A
Nickel	<0.007	mg/L	0.007	<0.007	WEW	95.2	N/A	N/A
Lead	<0.01	mg/L	0.01	<0.01	WEW	99.5	N/A	N/A
Antimony	<0.005	mg/L	0.005	<0.005	WEW	98.1	N/A	N/A
Selenium	<0.03	mg/L	0.03	<0.03	WEW	104	N/A	N/A
Thallium	<0.02	mg/L	0.03	<0.03	WEW	97.1	N/A	N/A
Vanadium	0.093	mg/L	0.005	<0.005	WEW	102	N/A	N/A
Zinc	0.112	mg/L	0.005	<0.005	WEW	101	N/A	N/A

## Method References:

Black, C.A. et al (ed.) Methods of Soil Analysis, 1965

SM- Standard Methods for the Examination of Water &amp; Wastewater, 18th Ed., 1992

SM- Standard Methods for the Examination of Water &amp; Wastewater, 18th Ed., 1992

SW- EPA Test Methods for Evaluating Solid Waste, SW-846 3rd Edition, 1986

U.S. Department of Agriculture Handbook No. 60

## Approved By:

Kevin C. Baros  
General Manager

## LABORATORY ANALYTICAL REPORT

Client: San Antonio River Authority  
 Project: Goliad County Water Study  
 Lab ID: C06120920-004  
 Client Sample ID: AA18480B-G Well 12 *Ted Long*

Report Date: 01/17/07  
 Collection Date: 12/16/06 13:05  
 Date Received: 12/20/06  
 Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>MAJOR IONS</b>							
Chloride	185	mg/L		1	A4500-Cl B	12/27/06 11:19 / j	
Sulfate	58	mg/L		1	A4500-SO4 E	12/26/06 10:44 / j	
<b>PHYSICAL PROPERTIES</b>							
Conductivity	1140	umhos/cm		1.0	A2510 B	12/22/06 14:27 / ja	
pH	7.68	s.u.		0.01	A4500-H B	12/22/06 14:27 / ja	
Solids, Total Dissolved TDS @ 180 C	684	mg/L		10	A2540 C	12/22/06 14:04 / th	
<b>METALS - TOTAL</b>							
Arsenic	0.002	mg/L		0.001	E200.8	12/29/06 18:48 / bas	
Selenium	0.002	mg/L		0.001	E200.8	12/29/06 18:48 / bas	
Uranium	0.0038	mg/L		0.0003	E200.8	12/29/06 18:48 / bas	
<b>RADIONUCLIDES - TOTAL</b>							
Gross Alpha	8.0	pCi/L		1.0	E900.0	01/06/07 11:50 / res	
Gross Alpha precision (±)	0.7	pCi/L			E900.0	01/06/07 11:50 / res	
Gross Beta	5.1	pCi/L		2.0	E900.0	01/06/07 11:50 / res	
Gross Beta precision (±)	1.5	pCi/L			E900.0	01/06/07 11:50 / res	
Radium 226	0.7	pCi/L		0.2	E903.0	01/14/07 14:32 / trs	
Radium 226 precision (±)	0.3	pCi/L			E903.0	01/14/07 14:32 / trs	
Radium 228	ND	pCi/L		1.0	RA-05	01/06/07 11:37 / pl	
Radon 222	500	pCi/L	H	100	D5072-92	12/26/06 12:10 / dpb	
Radon 222 precision (±)	154	pCi/L	H		D5072-92	12/26/06 12:10 / dpb	

Report: RL - Analyte reporting limit.  
 Definitions: QCL - Quality control limit.  
 H - Analysis performed past recommended holding time.

MCL - Maximum contaminant level.  
 ND - Not detected at the reporting limit.

## B Environmental

2713 Houston Hwy  
Victoria, Texas 77901

ph:(361) 572-8224  
Fax.(361) 572 4115

B E Sample #: 105406  
Project Name: Long  
Sample Location: Well  
Sample Date: 04/26/2007  
Sample Time: 11:24

Company: Goliad County Ground Water Dist.  
Contact: Art Dohmann  
Address: P O Box 562  
Goliad TX 77963-0562

	<u>results*</u>	<u>SDWA<sup>1</sup></u>	<u>Method</u>		<u>results*</u>	<u>SDWA<sup>1</sup></u>	<u>Method</u>
pH (units) <sup>3</sup>	6.85	6.5-8.5	SM 4500-H+B	Arsenic <sup>2</sup>	<0.02	0.050	EPA 200.7
Electrical Conductivity ( $\mu\text{mhos/cm}$ )	1,052	NECL	EPA 120.1	Barium <sup>2</sup>	0.062	2.000	EPA 200.7
Total Dissolved Solids <sup>3</sup>	526	500	by meter	Cadmium <sup>2</sup>	<0.002	0.005	EPA 200.7
Chloride <sup>3</sup>	158	250	EPA 325.3	Chromium <sup>2</sup>	<0.005	0.100	EPA 200.7
Fluoride <sup>2</sup>	0.5	4.0	Hach 8029	Copper <sup>2</sup>	<0.005	1.300**	EPA 200.7
Nitrate <sup>2</sup>	0.7	10	Hach 8171	Iron <sup>3</sup>	<0.01	0.300	EPA 200.7
Phosphate	0.24	NECL	Hach 8048	Lead <sup>2</sup>	<0.01	0.015**	EPA 200.7
Sulfate <sup>3</sup>	64	250	EPA 375.4	Mercury <sup>2</sup>	<0.0002	0.002	EPA 245.1
Total Hardness	357	NECL	SM 2340B	Selenium <sup>2</sup>	<0.03	0.050	EPA 200.7
				Silver <sup>3</sup>	<0.007	0.100	EPA 200.7
				Calcium	112	NECL	EPA 200.7
				Magnesium	18.8	NECL	EPA 200.7
				Sodium	117	NECL	EPA 200.7
				Aluminum <sup>3</sup>	<0.01	0.05-0.2	EPA 200.7

\* Results in mg/L (ppm), unless otherwise noted.

\*\* Action Level.

1 - Safe Drinking Water Act, Maximum Contaminant Level. Water supplied by municipal source.

2 - National Primary Drinking Water Standards (enforceable).

3 - National Secondary Drinking Water Standard (not enforceable).

NECL - No established contaminant level.

Approved By:

Kevin C. Baros  
General Manager

Test procedures used for this study were conducted in accordance with state and federal methods. However, the results contained on this report are for screening purposes only. If test results are outside of accepted SDWA guidelines, further testing may be requested. Contact your local county extension office or B Environmental with inquiries.